

## Take these steps to reduce your horses' risk of exposure to WNV

Mosquitoes travel less than 2 miles for mating and feeding, so you can reduce the risk of WNV if you eliminate stagnant water, which many mosquito species need to lay their eggs:

- ☑ Remove all discarded tires from your property
- ☑ Dispose of tin cans, plastic containers, ceramic pots or containers that hold water
- ☑ Be sure roof gutters drain properly and, if necessary, clean them in spring and fall
- ☑ Keep swimming pools, outdoor saunas and hot tubs clean and chlorinated, and drain water from pool covers
- ☑ Turn over plastic wading pools and wheelbarrows when not in use
- ☑ Empty birdbaths at least once a week
- ☑ Ask and help your neighbors eliminate mosquito-breeding sites on their property

*Consider keeping your horses indoors at night only if WNV has been confirmed in dead birds or mosquitoes in your area this summer.*

## Need more information?

Wisconsin Veterinary Diagnostic Laboratories  
Madison 1-800-608-8387  
Barron 1-800-771-8387

### WNV and wildlife:

- <http://www.wvdl.wisc.edu>
- <http://www.dnr.state.wi.us/org/land/wildlife/health/issues/wnv.htm>
- <http://www.nwhc.ucgs.gov/research/westnile/westnile.html>

### Using insect repellants safely:

- <http://www.epa.gov/pesticides/citizens/insectrp.htm#choosing>

### Additional WNV background information:

- <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
- <http://www.cdc.gov/ncidod/dvbid/westnile/q&a.htm>

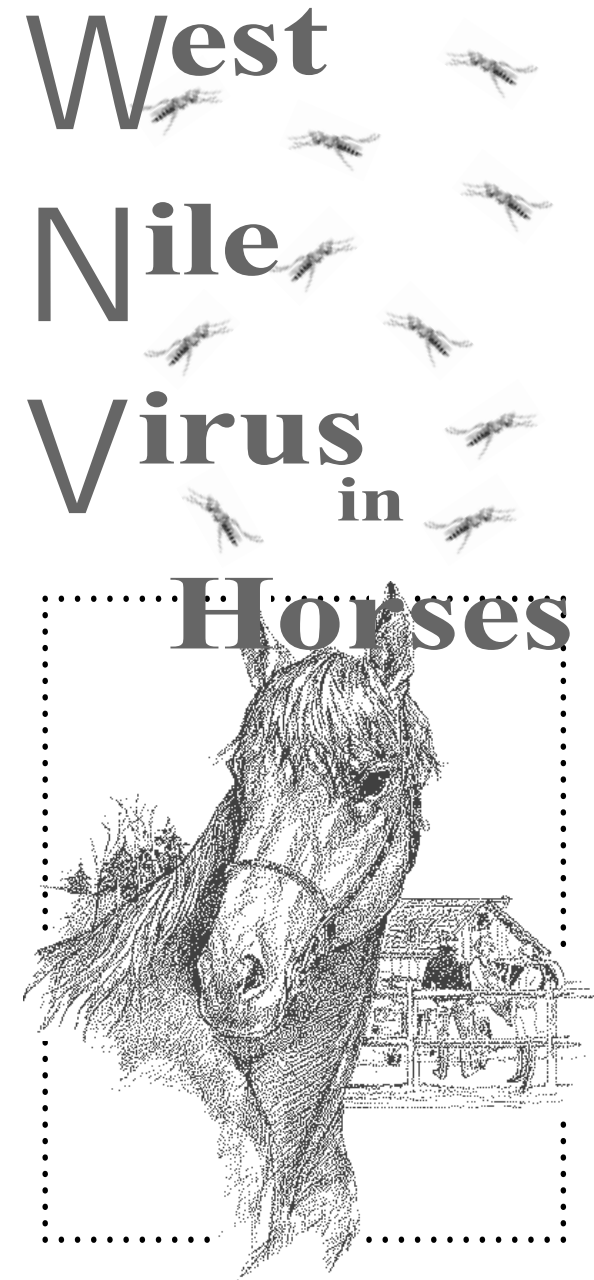
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*What horse owners  
should know about  
this mosquito-borne disease*

## What is West Nile virus?

West Nile virus (WNV) is a small virus transmitted by mosquitoes. It may cause illness and occasionally death in humans, birds, and horses. The disease is particularly severe in crows, ravens and blue jays. More than 50 species of wild birds and more than 20 species of mosquitoes have been found infected with the virus.

## When was WNV found in Wisconsin?

WNV was found in 58 dead birds (primarily crows) in 5 southeastern Wisconsin counties in August and September 2001.

## Is WNV here to stay in Wisconsin?

Yes. Studies indicate that once WNV is introduced to an area, mosquitoes there continue to carry and possibly transmit it every summer and early fall thereafter.

## Can animals other than horses and birds become ill if exposed to WNV?

It's unlikely. There have been no published reports of illness caused by WNV in dogs, cats or livestock (sheep, goats, cattle, pigs, deer, elk).

## How do horses get exposed to WNV?

Horses become infected with WNV after being bitten by an infected mosquito. Only birds get enough WNV viruses in their blood to be able to transmit the virus back to mosquitoes. Horses infected with WNV have very low virus numbers in their blood, so they cannot transmit the virus to other horses, people, birds or mosquitoes.

## What are the symptoms of WNV infection in horses?

The majority of horses exposed to WNV do not become ill. They become ill and show symptoms when the virus crosses the blood-brain barrier and causes inflammation of the brain (encephalitis) and/or the spinal cord (myelitis). Symptoms of WNV infection include depression and appetite loss, along with one of more of the following:

- Fever
- Weakness
- Paralysis in the hind limbs
- Muzzle twitching
- Impaired vision
- Head pressing
- Circling
- Aimless wandering

Occasionally, horses are unable to rise and they die. Less than 10 percent of horses exposed to WNV die from the disease.

## Is a WNV vaccine available for horses?

Yes, the U.S. Department of Agriculture issued a conditional use permit for a WNV vaccine in horses in 2001. If horses get 2 doses of the vaccine according to the manufacturer's recommendations, studies have shown it to be safe, and to produce antibodies to WNV. However, there is no data yet about whether the vaccine actually prevents clinical disease in horses.

## Should I vaccinate my horses for WNV?

Contact a veterinarian who is familiar with your animals and can discuss the pros and cons of vaccination with you. In addition, if you have any further questions about WNV, don't hesitate to contact your veterinarian.

## What other neurological diseases can be confused with WNV?

- Equine protozoal myeloencephalitis (EPM)
- Rabies
- Eastern, Western and Venezuelan equine encephalomyelitis (EEE, WEE, VEE, also known as sleeping sickness)
- Cervical vertebral myelopathy (CVM, wobbler)
- Equine degenerative myelopathy (EDM)
- Equine herpes virus 1 (EHV-1, equine viral rhinopneumonitis)

## Number of equine WNV deaths by state in 2001

Alabama, 4	Massachusetts, 1
Connecticut, 4	Mississippi, 7
Delaware, 1	New Hampshire, 1
Florida, 82	New Jersey, 15
Georgia, 22	New York, 2
Illinois, 1	North Carolina, 2
Indiana, 1	Pennsylvania, 4
Kentucky, 6	Rhode Island, 1
Louisiana, 3	Tennessee, 1
Maryland, 1	Virginia, 2